

VE Guidance No. 5 (Civil Works Program: Optimum Time to Conduct Initial VE Study)

1. The purpose of this e-mail is to provide addressees guidance in determining the optimum phase of a civil works project cycle to conduct the initial value engineering study.
2. The guidance upon when to do the initial value engineering study is developed by the undersigned based upon the following,

(1). Reference: CEMP-ZV memo dated 7 Sep 1989, subject: Interim Guidance for Cost Effectiveness Review/Value Engineering

Quote: "...On projects under the Life Cycle Project Management System, a study shall be performed on the earliest document available that satisfies the functional requirements of the project and includes a comprehensive engineering cost estimate..."

(2). Reference ER 1110-2-1150 dated 31 August 1999, Engineering and Design: Engineering and Design for Civil Works Projects.

Quote: Paragraph 13 (Engineering During Feasibility Phase), Section 13.14" Value Engineering. A value engineering study shall be performed on the earliest document available that satisfies the functional requirements of the project and includes a MCACES cost estimate..."

(3). Reference: CEMP-EV memo dated 10 August 1991, subject: Guidance for What Constitutes a VE Study?

Quote: Enclosure, Discussion. Paragraph 5, "When to perform VE has been stipulated by HQUSACE in the form of memoranda, Engineering Circulars, Engineering Regulations and other guidance. The following is stated to clarify and summarize this guidance... Civil Works.... On projects where an approved GDM exists, this should be the basis for the VE study... Feasibility Reports have replaced GDM's and thus this design level should be substituted for GDM's... Guidance noted in Reference E, however, stipulates performance of VE "before review of the feasibility report by higher authority."....Value Engineering may be applied as soon as a concept or design has been approved at the division or next higher level of review. Doing the study after approval provides more assurance to the VEST that project features will be as stated in the design and study efforts and will not be wasted on a feature that is changed because of higher authority comments..."

(4). Reference: Draft ER 11-2-XXX, undated, Corps of Engineers: Value Management/Value Engineering.

Quote: Appendix B, Paragraph 3.b.(1), "At least one V-E study will be performed during the feasibility phase of the project..."

3. Guidance: The optimum milestone to do the initial value engineering study is on the draft feasibility study document. At this stage the approved alternative has been selected and is supported by a fully funded code of accounts cost estimate with the associated MCACES back-up. This is the optimum milestone to do the initial VE study rather than the plans and specifications or design phase because conceptual changes can be introduced and approved without making drastic impact upon schedules and design manpower.